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And Record of Medical Science.

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PHILADELPHIA, March 28, 1844,
109 S. Tenth street.

CASE OF STRICTURE OF THE ILEUM, AND PERFORATION OF THE APPENDIX VERMIFORMIS CÆCI.

MY DEAR SIR:—The following notes of the last illness, and morbid appearances on the dissection, of one who had just attained those honours which would have enabled him to commence a career of professional usefulness and distinction, have been drawn up by the friend of the deceased—Dr. Child—at whose house he was attacked, whilst on a visit, with the malady that proved fatal, and whose attention to his friend was most devoted. Dr. Southwick was from Vassalboro', Maine, and had attended the medical lectures in Philadelphia for two sessions. He had passed an examination, most honourable to himself, in Jefferson Medical College; and, two days before the Commencement, when the degree was to have been conferred upon him in person, experienced the first symptoms of his malady. His first course of lectures he attended partly in Jefferson Medical College, and partly in the University of Pennsylvania. His last course was wholly in the former Institution. In both sessions, however, he attended the department of Institutes of Medicine—to the study of which he was much attached—in the two Schools. He had paid much attention to Chemistry, and his thesis, which was highly thought of by Professor Bache, as well as by myself, to whom it was submitted, was "On the Relations of Chemistry to Pathology." Histology, healthy and morbid, was arduously pursued by him, and he was a zealous and accurate microscopist. Some of the results of his histological examinations have appeared in the "Examiner." By those with whom he was personally acquainted in both Institutions, his zeal and acquirements were highly appreciated; and all must deplore, that a career, so auspiciously commenced, should have been thus prematurely terminated. But I need not say more to you, who knew him so well, and so favourably.

Believe me, my dear sir,
Very truly yours,
ROBLEY DUNGLISON.

Professor R. M. Huston.

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PHILADELPHIA, 3d mo. 29th, 1844.

To Professor Dunglison.

DEAR DOCTOR:—The following are the notes of the case of our late lamented friend, Dr. Edward W. Southwick.

On the night of the 18th inst. he had a severe attack of bilious colic, with the usual symptoms of pain, flatulence, and bilious vomiting. For this he had warm fomentations over the abdomen—Opii Acetat. gtt. xxv.—every two hours, and warm enemata. On the morning of the 19th, the pain and vomiting had abated; and there was some meteorism, with slight tenderness of the abdomen on pressure. In the afternoon, I gave a Seidlitz powder, and in the evening, half a fluidounce of Ol. Ricini. The pulse was natural, but no evacuation from the bowels: the enemata were therefore repeated. On the 20th, in the morning, the castor oil was again given, with 25 drops of the Oleum Terebinthinæ. In the afternoon, Dr. Dunglison was requested to see him with me; the pulse was still normal; there had been no evacuation since the morning of the 18th inst.; there was but little soreness of the abdomen, which was somewhat tympanitic, except over the region of the cœcum, where it was dull on percussion. Professor Dunglison diagnosticated subacute peritonitis, with obstruction of the cœcum; expressed his fears as to the result of the case; directed a continuation of the soothing course of treatment; and suggested the following pill:

℞. Hydrarg. chlor. mit., gr. x.
Pulv. opii, gr. iiss. M.

To be taken immediately: also, an enema, with Ol. Ricini, f.℥iss. and if no evacuation occurred by morning, an enema, with f.℥iij. of Oleum Terebinthinæ, and the application of twenty leeches to the abdomen, to be followed by warm cataplasms.

On the 21st, there had still been no evacuation; but the tenderness and meteorism had greatly diminished. Dr. Dunglison directed twenty-five leeches over the region of the cœcum, the continuation of the fomentations, and the following mixture:

℞. Ol. ricini, f.℥iss.
Aq. menth., f.℥iiiss.
Mucilag. acac., f.℥iss. M.

Two table-spoonsful to be taken every two hours until the bowels are opened.

In the evening, he had a warm bath and a large enema of warm water. At two o'clock on the morning of the 22d, he had a profuse fluid evacuation, containing fœcal matter; after which he was much prostrated. He now took some light nourishment, vomited several times through the day, and had thirteen or fourteen evacuations in the 24 hours. The soreness of the abdomen was almost gone, yet there remained great dulness over the region of the cœcum: he could move without much pain, but complained of a "*death-like sickness*," for which he took ice water, soda water, opiates, and Spt. Æther. Nit. at proper intervals, but without any relief. At two o'clock on the morning of the 23d, he vomited a large quantity of fluid matter, of the colour, consistence, and smell of the evacuations from the bowels. At six o'clock, he had a second attack of stercoraceous vomiting. On the morning of the 23d, Dr. Dunglison directed a quarter of a drop of creosote in camphor water, to allay the sickness, and a sinapism to the epigastric region; but the sickness continued. In the afternoon, Professor Meigs saw him. The abdomen was about in the same condition as in the morning; the dulness on percussion was found to extend along the ascending colon; he was very restless, but had not much pain; the death-like sickness, too, had somewhat abated, but he complained of uneasiness in the region of the heart. During the night, he took gtt. 150 of McMunns' Elix. Opii, and one grain of solid opium; but got no rest. He complained of a sharp, pungent pain in the bladder, as he supposed. At 3, A. M., on the 24th, I observed his pulse to be accelerated for the first time. It had not exceeded 80, nor had the skin been morbidly hot; but the pulse now beat 125 in

the minute. He had vomited but once in the night; the ejected matter being chiefly bile and the gastric contents. At 6, A. M., the pulse was 150 per minute. Throughout the disease, the countenance had been anxious.

At ten o'clock, when Drs. Dunglison and Meigs saw him, the pulse was 160, and the restlesness had increased, so as to cause him to be constantly moving about the bed. The pain of the abdomen on pressure was slight. He readily permitted his medical attendants to percuss the whole abdomen, and even to make considerable pressure. The dulness over the cœcum and ascending colon was as marked as ever. His most distressing feeling was an indescribable anxiety, which he referred to the epigastrium. It was now plain that he was sinking, and that he probably would not live many hours. At 12, M., he lay very quietly, the restlessness having given place to a calm, which was the precursor of rapid dissolution. At one, the pulse was imperceptible at the wrist; and at twenty-five minutes before 4, P. M., he died.

Twenty-four hours after dissolution, the body was examined by me in the presence of Drs. Dunglison, Meigs, Pancoast, North, Bibighaus, Griffin, Piper, and Robie. We found the whole abdomen tympanitic—the dulness, which had been so marked over the region of the cœcum, having disappeared. On opening the cavity of the peritoneum, a portion of fluid fœcal matter was found: very extensive recent adhesions existed between the folds of the intestines, and also between the intestines and the abdominal parietes, particularly on the left side, which had been tympanitic. The peritoneum was generally injected, and, in certain parts, very much so. There was a large quantity of fibrinous matter thrown out, which had formed bands in various directions over the intestines. The greatest evidences of injection and inflammation were around the cœcum and the ascending colon; there was a firm stricture over the ileum, about an inch from its termination in the cœcum, which bound it down to the right side of the body of one of the vertebræ. In the appendix vermiformis cœci, there was a perforation sufficiently large to admit the handle of a scalpel, when passed from the intestine; this had allowed fœcal matter to escape into the abdomen. A small mass of hardened fæces was in the cavity of the abdomen, about three lines long and one in diameter, which had probably been lodged in the appendix.

In this brief and hasty account, I have omitted saying anything in relation to the character of the deceased. The views expressed in the resolutions of a meeting of his former classmates, at which I had the honor to preside, are but a feeble tribute to the worth of our estimable young friend, whose loss we all so deeply deplore.

With sentiments of high regard and esteem,
I remain, affectionately,

HENRY T. CHILD, M.D.
No. 161 *Coates street.*

CARIES OF THE ACROMION PROCESS.

Mr. Fergusson, of King's College, has recently removed the entire acromion process of the left scapula for caries. When he commenced his operation, he supposed that he should meet with a small portion of bone, nearly or altogether loose, but he soon discovered that the whole process was affected, and required removal. The gouge and curved cutting pliers were the instruments used. The patient did well.

CLINICAL LECTURES AND REPORTS.

PHILADELPHIA HOSPITAL.

CLINIC OF THE JEFFERSON MEDICAL COLLEGE.

February 17, 1844.

BY PROFESSOR DUNGLISON.

[Reported by Samuel G. White.]

HYDROPIC CACHEXIA.

The lecture was commenced by introducing the case of hydropic cachexia presented at the last lecture, to report its progress towards a cure. The patient has nearly recovered, there being only a slight remnant of the cellular infiltration, as indicated by œdema of the ankles.

CARDIAC DISEASE.

The attention of the class was next directed to the case of cardiac disease, which, in consequence of the difficulty in forming a positive diagnosis, had excited so much interest on a previous occasion. (Examiner, for Feb. 10, p. 28.) The patient has become much thinner, and suffers from great dyspnœa, amounting to orthopnœa. This seems to be owing to the gravitation of the tumour on the left side of the sternum, which has increased considerably since the last lecture on the case. It has not pointed, but has expanded greatly; nor is there any manifest thinness of the integuments. In consequence of this appearance, together with the fact, that the tumour is below the integuments—for it may be felt beneath on raising the skin, and not, as in common abscess, condensed into the parietes of the sac—the Professor considers the idea of the tumour being produced by a partial aneurism of the heart, more probable than ever. Being a case so rare and interesting, the class were severally permitted to examine it; the Professor pointing out the peculiarities, and especially the heaving expansive movement, which could be felt over every part of the tumour, and which conveyed to the finger the sensation, that the pulsation was produced by a fluid driven into the sac. The true nature of the case will probably soon be revealed by death, but at present it is enveloped in much obscurity.

SCROFULOSIS.

The Professor then proceeded to offer some remarks on the morbid condition known as scrofula, in regard to which many indulge vague or confused views. The pathology of scrofula, and the definition of the term are differently expressed by different authors. Some define it to consist essentially of inflammation of the lymphatic glands, especially of those of the neck. This is too incomprehensive, and expresses but imperfectly the great characteristics of the disease. Although inflammation of the glands, and chiefly of the cervical, is very common in this condition, it is often absent—and it is only to be regarded as a functional expression of the morbid diathesis. The disease frequently expresses itself elsewhere, as in coxalgia, white swelling, caries, &c., and if we were guided by the above definition, we should be constantly in error. The professor believes, that scrofula is a morbid condition of the entire system of nutrition, and that, therefore, it should be classed among the cachexiæ; and that the inflammation and enlargement of the glands, like the eruption in variola, rubeola, &c., are merely attendant phenomena. The lymphatic ganglia are liable to simple inflammation from trifling irritation. A thorn, run into

the finger, developes enlargement of the glands of the axilla; inflammation of the mucous membrane of the intestines gives rise to mesenteric ganglionitis, owing to the extension of the irritation to the lymphatic glands, situate between the seat of irritation and the thoracic duct, &c. In the same manner, nutritive irritation, occurring in one of a scrofulous diathesis, may occasion inflammation of the same glands. But being general in its influence, scrofulosis may express itself in various other forms beside ganglionitis. With some it has been a question, whether it be not dependent on a morbid state of the blood? The Professor believes not; because the disease, or a tendency to it, exists prior to the formation of blood. An impulse to it must exist in the materials furnished by one or both parents at a fecundating copulation; which impulse persists, and is liable to be developed at some after period of the individual's existence. This tendency may not be communicated by the immediate parents, but may descend from the grandfather or grandmother;—thus, like facial resemblances, passing one generation. Some writers, among whom is Dr. Stokes, place this affection in the system of white vessels; in which, according to them, the lymphatics execute the function of veins. This view, in the Professor's opinion, is untenable, as it implies a something which probably has no existence—white blood. He considers the want of colour in certain of the tissues, as in the conjunctiva and serous membranes, to be due to the thin stratum of red blood circulating in their vessels, which renders the colour inappreciable,—not because they are nourished by white blood. A very thin stratum of any coloured liquid, viewed by transmitted light, appears to be colourless; but if the quantity of liquid be increased, the colour is manifest. Now, this is exactly the change which occurs in inflammation of the white tissues: the quantity of red blood in the vessels is increased sufficiently to render its colour perceptible; —not, that there is an enlargement of arteries destined in health to convey white blood, so as to admit red globules, as supposed by some. There are, in fact, no white arteries, and, consequently, no white veins. If such vessels indeed existed, they would be liable to continual obstruction from the red corpuscles. The function, executed by the lymphatics, would seem to be that of breaking down the old tissues, and converting them into lymph—a fluid essentially the same in every part of the lymphatic system—which eventually enters the circulation. In other words, they are engaged in the process of assimilation, or in that of the decomposition and renovation of the tissues. From what has been said, then, scrofulosis must be considered as a peculiar morbid condition of the whole system of nutrition. It is, for the most part, a disease strictly of childhood, being frequently arrested by the universal change which occurs at the age of puberty. Yet, although usually confined to childhood, it is not unfrequently developed in the adult—and even in advanced life.

Scrofulosis is very analogous to, although not identical with, tuberculosis. They both occur in persons of the same habit and appearance; but there is this difference, that tuberculosis is most frequently developed after puberty—the period when the tendency to scrofulosis is usually diminished or arrested. A person, however, having scrofula in early life, is more liable to tuberculosis at an after period. Persons having light hair, light eyes, fair skin, rather comely in appearance, and distinguished for precocity of genius, were supposed by the old writers to be more frequently the subjects of scrofula. The Professor's own experience, however, leads him to conclude that this cachexia occurs as frequently in those of an opposite cast. The negroes of the South are very subject to it, and in its most severe forms.

When a close investigation is made, it will be found, that infants of the scrofulous habit display evidences of imperfect formation; that their development resembles, in some respects, that of the fœtus before the seventh month of utero-gestation: the abdomen is prominent; the liver large; the head large; the extremities puny, &c.;—circumstances which confirm the view, that it is a disease of the system of nutrition.

The causes of scrofula are predisposing and exciting. Although a predisposition or tendency generally exists, yet under peculiar circumstances, which tend to deprave the nutritive action of the system—to lessen its powers, and impair its healthy functions, the cachexia may be developed when no predisposition is present; and, on the other hand, if the exciting causes be avoided, a person having a scrofulous tendency may delay or effectually prevent its development, even for life. The exciting causes are numerous. Any thing that will vitiate the system, as bad air, exclusion of light, improper or insufficient food, want of exercise, the congregation of numerous persons in a confined space, &c., may excite it. When exposed to like influences, all animals become diseased; hence, there is rot among sheep, measles among swine, pip amongst fowls, &c., &c., when closely congregated together. Such being the circumstances favourable to its development in man, it is most prevalent where these circumstances obtain. Hence it prevails extensively in factories, narrow, crowded streets, eleemosynary institutions for children, &c. &c.

As illustrative of the several points of the lecture, the Professor now introduced various scrofulous patients. Two of the number only exhibited evidences of inflammation of the cervical glands; one of whom presented a specimen of the unseemly scars produced by the spontaneous rupture of the ulcerated glands. Several others were affected with coxalgia, caries of the vertebræ, &c. One was a female, labouring under a total loss of intellect, or dementia.

[This led the Professor to make some remarks on the classification of the different forms of insanity, suggested by a letter which he had received that morning from a philanthropic merchant of Boston, and which he read to the class, proposing a plan for the reciprocation of documents from the various insane establishments of this country and of Europe. The lecturer thought it important that some divisions of insanity should be determined upon; and stated, that although objections might be made to the division into *mania*, *melancholia*, *moral insanity*, *dementia*, and *idiocy*, it was probably as good as any that had been proposed.]

The observations—the lecturer remarked—which he had made concerning the nature and causes of scrofulosis, indicate that the treatment must be both hygienical and therapeutical. He considered, that even more weight should be attached to the former than to the latter. As there is defective formation, any active depletory treatment would seem to be contra-indicated, unless some peculiarity in the case should demand it. Among the therapeutical means, the class of remedies described by him as eutrophics —that is, articles which, by being received into the blood, alter its condition, and, through it, modify nutrition without necessarily increasing the secretions—have been most employed. Iodine, and its

various preparations, have been very extensively administered; Lugol's solution more, perhaps, than any other, in consequence of the strong assertions in its favour by its proposer. The iodide of potassium has, also, an exalted reputation. Mercury, too, has been given, but it is often injurious, when pushed too far, in consequence of the debility it produces. Its combinations with iodine are often administered, when mercury is thought necessary. Although most flattering accounts are givenof the benefits of these different articles, the experience of the Professor does not justify him in declaring that he has found much good from them, except in rare cases. Recently, cod-liver oil—which is found to contain a small quantity of the iodide—has been highly lauded; but it is excessively disagreeable, and probably not more effective than so much olive oil, containing iodide of potassium, would be. It acts not only by the salt of iodine which it contains, but by the modified chyle which is produced by the digestion of the oil.

But hygienical measures must constitute the chief basis of general treatment. The patients should be removed from the exciting causes; the baneful influence, whatever it may be, should be taken away. Change of residence; removal to the sea shore; country air; free exercise in the open air; good and nutritious diet;—in fine, change of the entire circumstances of the individual should be inculcated. By this means, benefit will often result, the morbid tendency being arrested or greatly ameliorated. In addition to these general modes of treatment, the *expressions* of the disease demand attention. When the cervical glands become enlarged, suppurate, and are felt fluctuating, lay them open by an incision coincident with the folds of the neck, so as to prevent the unseemly scars, which invariably result when they are permitted to discharge spontaneously, or aided by poultices. The other affections, as coxalgia, caries, conjunctivitis, &c., require the treatment adapted for those diseases.

BIBLIOGRAPHICAL NOTICES.

A Dictionary of Medical Science, containing a concise account of the various subjects and terms, with the French and other Synonymes; Notices of Climate, and of Celebrated Mineral Waters; Formulæ for various Officinal and Empirical Preparations, &c. By Robley Dunglison, M.D., Professor of the Institutes of Medicine, &c., in Jefferson Medical College of Philadelphia, &c. &c. *Fourth Edition, extensively modified and enlarged.* Philadelphia: Lea & Blanchard. 1844 Royal Octavo, pp. 771.

Although less than two years have elapsed since the publication of the previous Edition, the Author has found it requisite to add to the present not fewer than *two thousand* subjects and terms; many of which have been introduced into medical terminology in consequence of the progress of the science. This fact shows how necessary it is that such a book should undergo frequent revisions. The only other work of the kind (Hooper's) in the market, has been stereotyped, according to our recollection, some twenty or more years, and consequently contains none of the terms introduced by Laënnec and others, expressive of the physical signs of diseases of the chest, names of modern pharmaceutical agents and combinations, besides thousands of other terms now in frequent use. We hope that neither the Author nor his Publishers, will ever be induced to stereotype this work. So long as the science is progressive, so long we shall have new terms to represent the improvements and alterations that occur, and a dictionary to be useful must embrace them. The present Edition of Dunglison's Medical Dictionary is not only more complete than any that has preceded it, but it is the very best work of the kind extant. We cannot conceive how any member of the profession can do without it.

A Treatise on the Diagnosis and Treatment of Diseases of the Chest, Diseases of the Lung, and Windpipe. By William Stokes, M.D., M.R.I.A., Physician to the Meath Hospital and County of Dublin Infirmary, &c. &c. Second Edition. *With an Introduction and numerous Notes.* By the American Editor. Philadelphia, Edward Barrington and George D. Haswell. 1844. Octavo, pp. 528.

This, we believe, is the Second *American* Edition of the work of Dr. Stokes on the Chest, it having appeared, or at least the greater part of it, several years ago in the "Library" conducted by Dr. Dunglison. The present Edition, however, is enriched by the labours of the Editor, (Dr. Bell,) whose additions consitute, in fact, no inconsiderable portion of the book.

Dr. Stokes is so well known as a judicious and eminently practical writer, that it is scarcely necessary to speak of the present treatise further than to indicate the particular subjects which it embraces. A leading object in the preparation of this work, seems to have been to point out the close connexion of the study of physical signs with that of symptoms, in affections of the respiratory organs, so as to illustrate their mutual bearing on diagnosis, and remove the unjust opprobrium thrown on the advocates of auscultation, that they neglect the study of symptoms. The author has endeavoured to simplify the subject as far as possible, and "to adapt the work to the wants of the practical man, always assuming that he is familiar with the groundworks of the subject—with the characters and causes of physical signs, as originally taught by Laennec, and more recently investigated in the works of Forbes, Williams and Clarke." In other words, he has not gone at any length into the characters of physical signs, but rather into the art of reasoning justly upon them. Herein, we think, the text is deficient. We hold with Dr. Johnson, that to be complete, a book should contain all that the reader may wish to know on the subject on which it is written. This deficiency, however, is supplied in a great measure by the remarks of the Editor, and his judicious selections from Walshe and others, contained in his introductory chapter.

The work is divided into a number of sections, treating severally of the diagnosis of thoracic diseases; diseases of the mucous membrane; diseases of the larynx and trachea; pneumonia; gangrene of the lung; perforating abscess of the lung; cancer of the lung; tubercle of the lung; and diseases of the pleura; beside the matter supplied by the Editor.

Altogether, this is one of the most useful of the publications that have recently issued from the press,—one that should be studied by every man who presumes to

treat the class of diseases on which it is written. It is delightful, indeed, to contemplate the sound pathology, and rational therapeutics which it inculcates;—so different from the swelling egotism, the groundless assertions, the illogical conclusions, and often empirical treatment, recommended in some of the modern works on these and other important medical subjects.

THE MEDICAL EXAMINER.

PHILADELPHIA, APRIL 6, 1844.

VAGINAL HYSTEROTOMY AND CRIMINAL ABORTION.

The last number of the New York Journal of Medicine contains an account of a case in which Vaginal Hysterotomy was performed on a woman during labour, by Professor Bedford, successfully for both mother and child. The woman had borne two children previously, at full term, without difficulty, and the operation appears to have been rendered necessary in this instance in consequence of injuries done to the parts, by means employed to effect abortion, at an early stage of her pregnancy. From the account given to her medical attendants by the woman, she had *miscarried five times* previously, in consequence of drugs administered to her for the purpose, by a notorious woman calling herself "Madame Restell." About six weeks after becoming pregnant again, she called on the same "Madame," who on learning her situation, gave her some powders with directions for use; these powders did not appear to produce the desired effect. She returned again to this woman, and asked her if there was no other way to make her miscarry. "Yes," says Madame Restell, "I can probe you; but I must have my price for this operation." "What do you probe with?" "A piece of whale-bone." "Well," thought the patient, but without expressing it, "I cannot afford to pay your price, and I will probe myself." She returned home and used the whale-bone several times; it produced considerable pain, followed by a discharge of blood.—Hence the injuries, and the operation referred to. From common report, this "Madame Restell" has been driving a brisk business in her line in New York, and from her advertisements it would seem with the greatest audacity. For a long time she contrived to escape the hands of justice; but from the exposition of her conduct by Professor Bedford in the present case, there is reason to hope she will yet reap her reward: indeed, we learn from the New York papers that the Grand Jury has already presented her to the Court, so that she will very shortly have an opportunity of proving her innocence—*if she can*. From the newspapers it also appears that several other persons have recently been convicted in that city, for similar offences. In Philadelphia, no one has been convicted of that species of murder since Chauncey: one, however, against whom a bill was found by the Grand Jury, some months ago, escaped without trial,—nobody knows how!

We have been favoured by Dr. Edward Hartshorne, Resident Physician of the Eastern Penitentiary of Pennsylvania, with the 15th Annual Report of that Institution. It is a highly interesting document, abounding in details concerning the health of the convicts, and the influence of the system of solitary confinement on their moral and physical condition. We regret that it came too late for the present number—it shall be particularly noticed in our next.

OVARIOTOMY.

The number of cases recently published of successful extirpation of the ovaries in the human female, is calculated to induce the belief that the operation may be performed with impunity. As a proper admonition under these circumstances, we extract for our *Record* of this number, from the London Medical Gazette of January 19th, two unsuccessful cases which have recently occurred. They come from sources which must command respect, and should inspire caution. One of the greatest objections to this fearful operation is the difficulty of diagnosis—of determining the character of the tumours discovered in the abdomen, the extent of their adhesions, and various other complications, often of a serious nature, which frequently attend their development.

In the same Journal, of December 8, 1843, Mr. Meath, a highly respectable "Lecturer on Midwifery in the Manchester School of Medicine and Surgery, and one of the Honorary Surgeons to the Union Hospital," has given the particulars of a case operated on by himself, in the presence of a number of Physicians and Hospital Surgeons, which, instead of being a case of ovarian disease, turned out to be an enlarged uterus "distended with solid matter." The abdomen being opened and the tumour brought into view, the true character of the case was revealed. In that condition of things, it was determined to extirpate the organ. "The excised mass was found to consist of the whole body of the uterus, enveloping a dense adventitious structure. It was of a perfectly smooth, uniform, globular shape, presenting no trace of salient points; weighed six pounds; had a diameter from above to below of seven inches, and a circumference in the transverse direction of tweny inches." The woman died seventeen hours after the operation.

The responsibility of the mistake in this case does not rest upon Mr. Meath alone, or those connected with him in the operation, but must be ascribed to the obscurity which attends the diagnosis of such affections. The narrator tells us expressly that "after repeated examination, and most careful manipulations, by myself and colleagues (of the Hospital,) made at different times and in every variety of manner, the conclusion arrived at was the presence of an *ovarian tumor*; and it was our *unanimous* opinion that the condition of the patient, and the mobility of the tumour, made it a fair case for extirpation by the abdominal section."

Great attention has lately been given to this subject in Europe, more especially in London, and the propriety of extirpation and the best manner of accomplishing it, are points warmly discussed in the Journals. Mr. Walne has performed the operation three times successfully, and has lately "met with some unsuccessful cases." The particulars of the former have been given to the public; those of the latter have *not yet* been published. Mr. Southam, Dr. Clay, Dr. F. Bird, and Mr. Lane, have all operated successfully. Mr. C. Aston Key, "although

it was long before he could bring himself to regard the extirpation of an ovarian cyst, as anything more than a successful accident, now believes that it is an operation simple in its performance, unattended with more than the usual risk of surgical operations, and called for by the hitherto intractable nature of ovarian disease." (Med. Chirurg. Rev., Jan. 1844.) Such is Mr. Key's *reasoning* on the subject—now for his *practice*. On the first of August last, he operated on "a fine-looking healthy girl," nineteen years of age, in whom the disease had commenced fifteen months previously. The operation was accompanied with no difficulties—there were no adhesions, very slight hemorrhage, and she bore the operation well,—and yet she died of peritonitis on the 5th of August, despite her "fine-looking, healthy" appearance, and all the skill and attention of Mr. Key and Dr. Lever.

The following remarks occur in an Editorial Notice of Mr. Walne's cases contained in the "British and Foreign Medical Review" of January last. Speaking of the operation: "It has been attempted in 37 cases. It has been actually performed 28 times: in 18 of these cases the patients recovered from the operation, in 10 they died: or deaths were to recoveries in a rather higher proportion than 1 to 2. Of the remaining 9 cases, in which the operation was left incomplete, either because the tumours could not be removed, or because no tumour existed, 3 terminated fatally; in the other 6 the patients recovered." The reviewer doubts whether the real results of the operation would present data so favourable, if we were in possession of all the facts on the subject. "But," he remarks, "even if we assume our present data to be correct, and that they do not at all overrate the success of ovariotomy, it may be fairly asked,—Is an operation which is followed by the death of more than 1 in 3 of those in whom it is completed, a fit subject for boasting of as a triumph of art, as constituting an era in the annals of surgery? Is human life so worthless, as to warrant the repetition of the operation, again and again, till, forsooth, we thus obtain more extended statistics?"

From the following expressions of the same writer, it is to be inferred that more *unsuccessful* cases have occurred in "the Metropolis," or some where else, than have been "permitted to see the light."

"And here we feel it our duty to animadvert, in the strongest terms, on the backwardness of those who, having so speedily published their successful cases, delay to publish their unsuccessful ones. We are unwilling to impute improper motives to these gentlemen; they may have good reasons for their silence of which we are ignorant; but the reasons must be strong indeed, to justify a proceeding fraught with such momentuous consequences to the profession, and to society at large."

RECORD OF MEDICAL SCIENCE.

Case of the Removal of a Diseased Ovarium, terminating fatally on the seventh day after the operation. By J. M. Greenhow, Esq., Surgeon to the Newcastle Infirmary, and Eye Infirmary. [Communicated by Sir B. C. Brodie, Bart.

The patient was aged 29 years, and married. For four years she had suffered from frequent discharges of blood from the uterus. Eighteen months ago—that is, six months after her marriage—the swelling in the abdomen commenced at the pubic region, and rapidly increased till it attained a large size; her strength all the while declining from the constant uterine discharge. The abdomen was tapped, and only a little blood escaped; but afterwards nearly a quart of dark-coloured fluid was discharged daily from the wound for about a fortnight. Before the operation of removing the tumour, which was performed September 3d, the abdomen was about as large as at the full period of utero-gestation; there was fluctuation in one or two parts, but generally the tumour was firm, and felt as if divided into separate masses. The incision reached from a little below the ensiform cartilage to near the pubis. Several adhesions existed at different parts, the principal one being to the omentum, which was spread over the upper part of the right side of the tumour. These adhesions were divided with the bistoury, and then the tumour was raised, with some effort, owing to its great size and weight, from its situation. Double ligatures were passed through its pedicle, and firmly tied; and this part being divided near the tumour, it was liberated from its attachments and removed. Two arteries bled freely, one in the divided omentum, and the other in the pedicle; upon these being secured, the wound was brought together by sutures and adhesive plaster, and a bandage applied.

The operation was well borne by the patient, although she vomited several times towards the end. The quantity of blood lost did not exceed six ounces. The symptoms which followed were chiefly great retching and vomiting, constipation of the bowels, quick pulse, tenderness and distension of the abdomen; and she died on the morning of the seventh day. On the post-mortem examination, the folds of the intestines and the omentum were found glued together by recently effused lymph; there was inflammatory redness, with points of ulceration near the pyloric orifice of the stomach. The uterus was healthy, but its cavity was lined with a vascular membrane like the decidua. The morbid growth had been attached to the left broad ligament. On examining the tumour it was found to weigh twelve pounds seven ounces, and to be more than two feet in circumference. Its surface was smooth, and of a pale colour, resembling that of the skin. With the exception of a few cysts containing a yellow fluid, the general mass was composed of a dense vascular cellular structure, with a number of small cells or cysts pervading its substance. The author concluded by making some remarks on the case; he directed attention particularly to the disease found in the stomach, which he considered had an important influence in leading to the fatal termination; and thought, on the whole, that the result of the case did not offer a strong argument against resorting to a similar operation in such cases.

Case of Extirpation of an Ovarian Cyst. By Bransby B. Cooper, F. R. S., Surgeon to Guy's Hospital.

The patient was aged 32, and married for four years, without having children. She had suffered at different periods from dysmenorrhœa, and leucorrhœa. Five years before her admissisn her abdomen became greatly enlarged, and, having consulted the author, he considered the case to be one of ovarian tumour, and proposed to draw off the fluid from the cyst, and then remove the cyst by a small opening in the abdo-

men. But this plan was not carried into effect. She was afterwards tapped on two different occasions, when about three gallons of straw-coloured fluid were discharged each time. When she applied at the hospital, earnestly soliciting to have the operation of removing the tumour performed, her abdomen measured about three feet and a half in circumference. Mr. Cooper resolved to perform the major operation. An incision was, therefore, made through the abdominal parietes, from the ensiform cartilage to the pubis. A few adhesions to the tumour were met with near the point where the trocar had entered in tapping; these having been divided, the cyst was dislodged and brought through the wound, when the pedicle connected with the right ovary came into view. A double ligature was passed through the pedicle, and both threads having been tied, the pedicle was divided between the cyst and the ligatures. The left ovary was examined, and found to be healthy. The wound was then brought together by sutures and strapping, and a roller applied round the abdomen. There were some attempts to vomit, but otherwise the patient bore the operation well. A minute record was given of the daily condition of the patient subsequent to the operation; but it is sufficient to say that distinct symptoms of peritonitis soon appeared, and the patient died on the seventh day, without any indication of the system rallying.

On the post-mortem examination, lymph was found effused extensively over the abdominal parietes and viscera, uniting them in many places together. A small piece of omentum was enclosed in the ligature applied to the pedicle. The uterus was large, tumid, and of a dark colour; and a soft fungous tubercle, pronounced, after microscopical examination, to be malignant in its structure, was found on its fundus. The cyst which was removed was of an oval form, and at its superior and anterior part there was a collection of compound cells. Its weight was thirty-two pounds.

The author concluded by making some general observations on the operation. He drew attention to the peculiar kind of inflammation which followed, and was inclined to think that it was excited more by the presence of the ligature applied to the pedicle, and left in the wound, than to the extensive incision. He also noticed the fact of a tumour of fungoid structure having been found growing from the substance of the uterus, and thought that this was interesting as illustrating the views of those pathologists who believed ovarian tumours, consisting of cysts to be malignant in their nature, and as bearing on the question of the propriety of removing such tumours by operation.—*Lon. Med. Gaz.*, Jan. 19, 1824.

MR. PAGET'S REPORT CONTINUED.

TRANSFORMATIONS OF NUTRITIOUS SUBSTANCES.

Among the numerous papers written on the transformations which the food undergoes in its passage in the body, the most interesting and almost the only ones which afford any definite conclusions are those relating to the formation of fatty matters from the saccharine and starchy principles. It seemed to be proved by Huber's experiments on bees that wax could be formed by them out of pure sugar or honey; for when their food contained nothing but one of these they formed their combs as usual. M. Dumas, who had opposed Liebig's deductions from these facts, suspected that the wax might be formed from the fat which the bees had in their own bodies before they commenced their purely saccharine diet. He therefore, with M. Milne Edwards, repeated the experiment, and in a successful trial obtained the following results: 1988 bees were inclosed in a hive, and from an analysis of the bodies of 117 from the same stock it was estimated that the bodies of the 1988 contained 3·218 grammes of fatty matter. The honey on which they fed contained 8-10,000th of waxy matter. The experiment was continued thirty-one days, and the bees consumed 834·889 grammes of honey, and produced 11·515 grammes of wax, or at the rate of 0·0064 for each bee. After the experiment 105 bees were analysed, and yielded 0·442 gr. of fatty matter, or at the rate of 0·0042 gr. each. Thus the fatty matter pre-existing in each bee was 0·0018 gr., and the quantity furnished to each in its food was 0·0038: but each produced in thirty-one days 0·0064 gr., and each at the end contained 0·0042, giving a total of fatty matter 0·0106, and an excess, which must have been formed by transformation of the food, equal to 0·00742 gr. per bee.

The old view of the production of the oleaginous constituents of the bodies of herbivora by the transformation of the saccharine and amylaceous principles of their food is thus confirmed; and the evidence is the better for its being honestly published by one who had been the chief opponent of the view. Connected with it is a fact recently observed by MM. Pelouze and Gelis, that under certain circumstances, butyric acid is formed during the fermentation of sugar. By the action of the acid thus obtained upon glycerin they formed also butyrin, another of the constituents of butter. Still, however, the results of the experiments on which Dumas' former opinion was founded are important, as proving that the several articles of food of the herbivora contain a much larger proportion of fatty matter than had been imagined. In maize and other grains, for example, he has found from 7 to 9 percent., and in grass, hay, &c. considerable proportions, which in all probability contribute to the formation of the fat, though they are not its only source.

Assimilation. In the last Report some remarkable observations were referred to, proving the analogies between the forms assumed by certain inorganic precipitates such as those of the carbonates of lime and iron, and the forms of the nuclei and cells of organic tissues. Now, Dr. Hermann Jordan, of Saarbrück, has called attention to the phenomena of the reparation of damaged crystals, as bearing analogy to the repair of injured organized bodies. The facts which he establishes are these: 1. Any portion of crystal —whatever surfaces, angles, or edges may have been removed from it—may, under proper circumstances, repair itself into a complete individual; that is, restore itself to the same form which it would have had if no injury had been done to it. 2. At the same time with the reproduction of the truncated part, a growth of the whole crystal takes place: *but the effort of the formative act is especially directed to replace the lost part.* 3. The effort at reparation stands in a direct relation to the extent of the loss, and decreases in proportion as the loss is replaced. 4. He points out the mode in which the process of reparation takes place, and concludes that his examinations "have demonstrated the tendency of individuals to maintain their integrity and to replace material losses by the formation of more matter, according to the type of their original form, as a phenomenon to be observed as well in inorganic as in organic nature—as a phenomenon which belongs to the individual as such,

whether it have a membered body or the simple structure of a crystal."

ORGANS OF ANIMAL LIFE.

Chemical composition of bone. The following are the results of the most recent and careful analyses of human bone, by Marchand and Lehmann. In both cases the bones were deprived of fat and periosteum: in each the average of six examinations is given; Marchand's were made on thigh-bones, Lehmann's on the long bones of the arm and leg.

		Marchand.	Lehmann.
Organic mat.	Cartilage insol. in h.cl. 27.23 " soluble " 5·02 Vessels 1.01	33.26	32.56
Phosphate of lime		52·26	54·61
Fluate of lime		1·	
Carbonate of lime		10·21	9·41
Phosphate of magnesia		1·05	1·07
Soda		0·92	1·11
Hydrochlorate of Soda		0·25	0·38
Oxydes of iron and manganese and loss		1.05	·86
		100·	100·

The following are average relative proportions of organic and earthy matter, collected by Lehmann from his own and the analyses of two other observers.

	Sebastian.	Lehmann.	Frerichs. Compact bone.	Frerichs. Spongy bone.
Organic	36·66	32·28	31·2	37·82
Earthy	63·34	67·72	68·8	62·18

All found that the earthy matter increases with age.

In a memoir on ancient and fossil bones, M. Gerardin states that the degrees of alteration which buried bones undergo depend almost entirely on the degrees in which the soils are exposed to air and moisture. They always lose more or less of their animal matter; and sometimes, when they lie in a soil traversed by streams of water, it is completely removed: the ammonia proceeding from the part first decomposed saponifies the rest and makes it soluble. In human bones long buried and in fossil bones there is always more subphosphate of lime than in recent bones; in *human bones* long buried the proportion of carbonate of lime is generally diminished, in fossil bones it is increased. In fossil bones also there is always some fluate of lime; in human bones, under whatever circumstances, there is none: it seems to be introduced into fossil bones by infiltration from without, and its presence may be depended on as a sign that a bone is really fossilized.

Structure of bone. Dr. Fleischmann has described the minute structure of *vegetable ivory*, from the fruit of the *manicaria saccifera*, (Gärtner,) a species of palm growing near the coast of Guiana, as being closely analogous to that of bone, at least in regard to the *corpuscles* which it presents. It possesses also, he says, somewhat of the chemical properties of bone. Thin sections exhibit the most beautiful structures, like the bone-corpuscles, except that they are more regular, and lie within regularly-formed cells, of which they appear to be the nuclei. Branches like the calcigerous canals proceed from each corpuscle, but do not give off smaller branches nor extend beyond the wall of the cell; each branch ends within the cell-wall in a bluntly-closed extremity. He believes that there is the same arrangement in true bone; that each corpuscle has, like a nucleus, a distinct cell-wall around it, such as he has figured in a section of bone from a child; that the canals of the corpuscles are unbranched, and that they end within the cell-walls, having only an appearance of anastomosis with the canals in adjacent cells.

The chapter on 'Bone,' in the 'Physiological Anatomy' of Todd and Bowman, contains by far the best plates yet published of the minute osseous structure. The ultimate structure also is there described, from preparations made by Mr. Tomes, to be granular. The ultimate granules vary in size from 1-6000th to 1-14000th of an inch; they are oval or oblong, and cohere firmly, possibly by the medium of some second substance. In some instances Mr. Tomes has met with a very minute network, which seems adapted to receive them in its interstices; but this he considers, requires confirmation.

Process of ossification. In the same work is a description of the process of ossification, which is, in several points, new and interesting, (p. 117.) In the vicinity of the point of ossification the nucleated cartilage-cells (which usually are scattered irregularly) arrange themselves in linear series, which run down, as it were, to the ossifying surface. At first the series are small and not regular, but nearer to the ossifying part they form rows of twenty or thirty. The cells in these rows are closely compressed, and their nuclei seem flattened. The lowest rows dip into and rest in deep narrow cups of bone, formed by the osseous transformation of the intercellular substance between the rows, and as ossification advances these cups are converted into close areolæ or *cancelli*, with extremely thin lamelliform walls. Immediately upon the ossifying surface, nuclei, which before were closely compacted, separate considerably from one another by the increase of material within the cells: they also often enlarge and become more transparent. Deeper in the new bone the lamellæ which inclose the cancelli, and which were formed by the ossification of the intercellular substance, are found thicker and more like perfect bone: they include in their substance elongated oval spaces, which, except that they are roughly granular, exactly resemble the ordinary *bone-corpuscles*, and which are evidently the nuclei of the cells of the temporary cartilages. The curvilinear outline of the now ossified cells of these nuclei can often be discerned. Within the cancelli only a few cells can be detected, these cavities (of the cancelli) being chiefly occupied by a quantity of new substance, consisting of granules, and resembling a formative blastema or basis. It thus appears that after the ossification of the intercellular substance, (by which are formed the lamellæ which are the walls of the cancelli,) the rows of cartilage all arrange themselves on the inner surface of these newly-formed cancelli, and are ossified, with the exception of their nuclei, which remain granular, and subsequently form the corpuscles of bone; and that a new substance or blastema appears within the cancelli, from which, probably, vessels are developed, and the further steps in the growth of the bone proceed.

THE DEATH OF SIR FRANCIS BURDETT.

On the 8th of October, 1843, Sir F. Burdett placed himself under the professional care of an hydropathist, who has an establishment in the neighbourhood of London. He was confidently assured that if he adopted the "water-cure" he would have no return of the gout, and, in fact, that all tendency to the disease would be removed. Sir Francis, accordingly, subjected himself to the treatment. Contrary, however, to the predictions of his medical adviser, early in the December following he had a return of his old enemy. At this period Lady Burdett became seriously ill, and Sir Francis was compelled to leave the hydro-

pathic establishment. He, however, frequently visited the institution, and continued to use the cold-water remedies, both at the establishment and at his own house. Lady Burdett (who, although strongly recommended, was not permitted to adopt the hydropathic mode of cure?) died of scirrhus of the stomach. She was attended by Dr. Ferguson and Sir B. Brodie. Sir Francis (so great was his faith in the plan he was pursuing) persisted, almost to the very last, in maintaining that had Lady Burdett submitted to the cold-water treatment, her life would have been prolonged. On the very day upon which Lady Burdett was to have been buried, Sir Francis was seized with an attack of hæmorrhage from the lungs. Up to the Saturday previously to Sir Francis's death the hydropathist was in attendance, but at that time Miss Burdett Coutts peremptorily refused to allow any more hydropathic experiments to be tried upon her father without the full concurrence of his physician. Shortly subsequent to this, a physician in the metropolis, who had frequently been in attendance upon Sir Francis, received a communication from Miss Burdett Coutts, in which she said that she had no hesitation in asserting that the cold-water treatment had destroyed one of the noblest constitutions ever given to man; that it had reduced Sir Francis to a state of great debility, from which it was impossible for him to recover. She also expressed her determination to resist the further use of such quackeries, unless sanctioned by the medical gentlemen who had been consulted. The proximate cause of Sir F. Burdett's death is said to have been an affection of the lungs, and subsequently of the brain, arising, as it is stated, from a translation of the gout from the extremities to the above-named vital organs. For this attack he was attended by Dr. Farr. Sir F. Burdett was quite delirious for at least twenty-four hours preceding his dissolution, and recognised no person near his death-bed. It has been said, that so wedded was Sir Francis to the unfortunate cold-water delusion, that he was in the habit of riding out on horseback, enveloped in wet towels. He thought highly of hydropathy, but he had extended the same confidence previously to St. John Long's mode of treatment, as well as to homœopathy.—*Times.*

Case of alarming Syncope from the Admission of Air into a Vein during an Amputation at the Shoulder-joint. By Bransby B. Cooper, Esq. F.R.S. Surgeon to Guy's Hospital.

The patient, a female, nineteen years of age, was admitted on the 17th of May, 1843, under the care of the author, for enlargement of the middle third of the humerus. She had suffered pain in the seat of the disease for eight months, but the swelling did not commence till six weeks before her admission into the hospital. From the history and the examination of the arm, the tumor was considered to be a malignant disease of the bone, and amputation at the shoulder-joint was resolved upon. This operation was performed on the 23d of May. The arm was removed in less than a minute, and with very little loss of blood. When the limb had been severed from the body, the patient, who had borne the operation with great fortitude, expressed her thankfulness in a firm and audible voice The subclavian artery was immediately secured, but its compression still retained upon the first rib, as there were small vessels requiring ligature. The author then proceeded to remove a gland, which was somewhat enlarged, from the axilla; and while dissecting it from its cellular attachments, he distinctly heard a peculiar gurgling noise, like air escaping with fluid from a narrow-necked bottle; and at the same instant the patient fell into a state of collapse, threatening immediate dissolution: the countenance was deadly pale; pupils fixed, and unobedient to light; the pulse quick, small, and fluttering, although at intervals regular; the respiration was irregular, being hurried and feeble, and attended occasionally with a deep sigh. The patient was directly placed in the horizontal posture, the flap brought over the wound, and retained by plaister; and various stimulants were administered. An hour elapsed before she was sufficiently recovered to be removed from the operating theatre. Upon being placed in bed, she passed her fæces and urine involuntarily. When the reaction was coming on, she uttered a continued whining cry, and maintained a constant motion of alternate flexion and extension of the right leg, while the left remained perfectly quiescent, and seemed insensible to feeling, as well as motionless. She complained also of pain running up the right side of the head and neck. For several days she remained with her eyes closed. The lower extremities in the same condition as described, and the pulse very frequent. It was found necessary to give her opiates at different times, which relieved her general restlessness, and procured sleep. On the fourth day, the left leg was also affected with involuntary contractions; but these subsided on the following day. On the 25th day she was able to leave her bed. The motions of the right leg had ceased at this time, but she complained of great numbness and loss of power in the left leg. On the 3d of July she was sufficiently recovered to leave the hospital, having no other unfavourable symptom but a slight dragging of the left leg. The author concluded his paper by adding remarks on the consequences of air being admitted into the veins, and pointed out the resemblance between the symptoms in his case and those presented in other similar cases upon record, as well as in experiments upon the lower animals, made to elucidate the subject. He drew attention to the different effect produced in man compared with brutes by the admission of air, owing to the influence of mental agitation on the motions of the heart in the former. He also dwelt on the various modes of death in such cases, according as the air introduced distended and paralysed the walls of the right cavities of the heart, or was sent onwards, mixed with the blood, to the lungs, or was transmitted by the arteries to the brain; and he ended by offering some practical remarks on the best mode of guarding patients from such dangerous occurrences in operations about the neck and shoulder.—*Lond. Med. Gaz.*, Dec. 22, 1843.

ANIMALCULES IN THE INTESTINAL CANAL.

MM. Gruby and Delafond read a paper at the Academie des Sciences, on the 11th of December, on certain animalcules existing in great numbers in the stomach and intestines of herbivorous and carnivorous animals during digestion.

These physiologists, while pursuing their researches on digestion, made the discovery of numerous animalcules which are born, live, and die, in the stomachs of ruminantia—of the dog and pig, and in the large intestines of the horse. These animalcules exist in such numbers, and their presence is so constant, that they may be supposed to be of some service in the act of digestion. The following are the conclusions which may be drawn from their communication.

1. That the ruminantia have four species of living

animalcules in their stomachs, during the period of digestion.

2. That the horse has seven species of living animalcules in the cœcum and dilated portion of the colon.

3. That the dog has two species of monads in the stomach.

4. The pig has only one species of animalcule in his stomach.

5. The animalcules of digestion are born, live, and swim in the acid liquid contained in the stomach.

The great number of these animalcules in the two first stomachs of ruminantia, the presence of their empty exuviæ in the third and fourth, and in the excremental matter, the considerable number of them in the cœcum and dilated colon of the horse, as also the existence of their empty exuviæ in the contracted colon and rectum, lead the authors to believe that the organic matter of these animalcules is digested in the stomach of ruminantia, and that it is absorbed in the contracted portion of the colon of the horse, and that, in both cases, it furnishes an animal matter for the purpose of digestion.

The conclusion to be drawn from these facts seems to be that, since in a state of nature herbivorous animals receive only vegetable matter into their stomachs, a fifth part at least is destined to give birth to a great quantity of animals of an inferior development, who, digested in their turn, furnish animal matter for the general nourishment of herbivorous animals. This conclusion seems the more reasonable, as in the dog and pig, which are fed on animal and vegetable substances; the animalcules are smaller, less numerous, and of only one or two species.—*Prov. Med. Journ. from Gaz. Medicale*, Dec. 16.

ANATOMICAL RESEARCHES ON THE EXCRETORY DUCTS OF THE LACHRYMAL GLAND.

M. Gosselin, prosector to the Faculty of Medicine, Paris, has recently been making some inquiries with a view to determine the exact number of the excretory ducts of the lachrymal gland, respecting which anatomists do not agree. Stenon, who first discovered them, in the calf, says there are thirteen or fourteen, but only represents eleven, in his plates of the eye. Most anatomical writers since Stenon, have stated that they are ten or twelve in number. Monro, however, who first saw them in the human eye, was only able to inject two.

M. Gosselin began by looking for the ducts in the sheep, in which animal they were discovered by Stenon. He found the orifices of two ducts, with ease, but although he examined the mucous surface with the greatest attention, he could never discover any other orifices. On introducing a small lymphatic injection tube into the two foramina, he found that the mercury penetrated into every region of the lachrymal gland, without any other ducts becoming visible; and therefore concluded that the two he had injected were, in reality, the only ones which existed. As the same experiment, performed on the eye of another sheep, was attended with the same result, M. Gosselin thinks that, generally speaking, there are only two excretory canals to the lachrymal duct of the sheep, although more are said to exist by Stenon.

The lachrymal gland of an ox was next examined. In this animal the ducts are large, and the foramina easily perceived, opening obliquely under the conjunctiva, in the same manner as the ureters in the bladder. Only five were discovered, and it was not found possible to inject them, owing probably to the density of the glandular tissue of the organ in this animal.

M. Gosselin then turned his attention to the human eye, but found great difficulty in prosecuting his researches. The orifices of the ducts are so minute that it is scarcely possible to perceive them at first. When the mucous membrane is macerated, as anatomists direct, in coloured solutions, there are so many points coloured that it is impossible to look upon them all as foramina. By means of the minute glass tubes for lymphatic injections, after many attempts, M. Gosselin, succeeded however, in injecting the ducts and the lachrymal gland, but never found more than two ducts going directly to the gland, so as to render possible its injection by their means. The other ducts, six or eight in number, led to the small glandulæ, or prolongations of the orbital gland, which are known to anatomists under the name of "the palpebral portions of the lachrymal gland."

The plan he adopted to make these injections is as follows: The lachrymal gland was separated from the orbit, along with a certain portion of the superior palpebra. The eyelid being then spread over the indicator of the left hand, the mucous membrane was firmly stretched. A certain number of small points, situated on an oblique line, downwards and outwards, were then seen, below the reflection of the conjunctiva. The smallest glass tube that could be made was introduced with the greatest precaution, successively, into each of these foramina, and the mercury was allowed to flow during ten or fifteen minutes.

These researches have a practical result, says M. Gosselin. After several operations in which the lachrymal gland had been extirpated, it was remarked with surprise that the eye was still lubricated with the lachrymal fluid, and retained its humidity and polish. This circumstance was owing, no doubt, to the integrity of the palpebral glandulæ, which having separate excretory ducts, continued to supply the eye with a sufficient quantity of the lachrymal fluid to perfectly lubricate its surface. It is therefore evident that whenever it is necessary to extirpate the lachrymal gland, there need be no fear entertained with regard to the integrity of the functions of the eye, if the glandulæ of the superior palpebra remain intact.—*London Lancet, Jan.* 27, 1844.

OPEN ANUS IN CERTAIN FORMS OF FÆCAL INCONTINENCE.

In a case of severe sporadic dysentery, recently related by M. Bouchut (Jour. de Medicine), the anus remained permanently open, and allowed the contents of the rectum to escape, without the patient being able to restrain their emission. This state of the anus he ascribes to weakness of the sphincter ani, and to predominance in the action of the levator ani, which is the dilator of the anus.

The paralysis of the sphincter ani in this case may be explained by a principle in pathology, on which great stress is laid by some continental pathologists, among whom we may mention M. Gendrin. According to this pathological law, whenever a mucous membrane is severely inflamed, the muscular fibres which are in contact with it become paralysed, as a necessary consequence of the propagation to them of the inflammation. Thus, when the mucous membrane of the larynx is inflamed, the muscular fibres of the vocal cords are paralysed, and aphony follows. The existence of the law may be illustrated by many other examples. In bronchitis, or inflammation of

the bronchial mucous membrane, if the inflammation is intense, extreme dyspnœa follows, and as M. Gendrin very correctly remarks, all the symptoms of pulmonary emphysema ensue, owing, no doubt, to the paralysis of the muscular fibres of the bronchial tubes. In peritonitis the inflammation of the peritoneal covering of the intestinal canal extends to the muscular coat, completely paralyses it, and thus gives rise to constipation; as, also, the paralysed intestine no longer offers any resistance to the expansion of the gases it contains, tympanitis follows. In severe enteritis it is the inflammation of the mucous membrane which paralyses the muscular structure; but as the intestinal mucous membrane is separated from the muscular one by a fibro-cellular layer, the inflammation acts less intensely on the muscular fibres than in peritonitis, and unless it be very severe, diminishes, but does not abolish, its contractile power; thence it is that generally speaking in enteritis we have mere constipation, tympanitis only existing in the worst cases.—*Ibid.*

BLOOD-LETTING AS A DIAGNOSTIC.

Mr. Barlow has detailed several cases to show that when, in cases of supposed inflammation, there is not any tolerance of loss of blood, but, on the contrary, the patient faints soon when bled in the upright position, the complaint is one of irritation, and not inflammation.—*London Medical Times.*

STATE OF THE PUPILS IN INJURIES OF THE HEAD.

Dr. Lawrie, in a paper on injuries of the head, states, that the pupils were contracted in four cases, contracted and insensible in three, dilated in two, dilated and insensible in two, sluggish in two, and in four cases one was contracted, the other dilated, and both insensible to the stimulus of light. In one case, they alternately contracted to a mere point, and dilated to a very large extent. The condition of the pupil does not uniformly correspond with the extent of the injury, nor with the situation of the extravasation; at the same time, in the majority of cases, it was dilated when the extravasation was very extensive, and almost invariably so previous to dissolution. In the cases of concussion, there was not any instance of the one pupil being dilated and the other contracted, while this symptom is noted as having occurred in one-sixth of the cases of extravasation.—*Medical Times.*

ALCALINE SALIVA.

Dr. Wright says, saliva which contains an excess of its natural alcali is always to be regarded as indicative of local or general nervous excitement. This rule may, however, admit of an exception where much carbonate of soda is taken internally.—*Ibid.*

CASE OF DEATH FROM GLANDERS.

A wealthy wine-grower at Verzy, in the Aube, named Beuzard, having a glandered horse, was, a few days ago, giving him a drench recommended by the veterinary surgeon, when the gag by which the animal's mouth had been kept open, slipped out, and M. Beuzard received a wound in his cheek, from one of the teeth of the horse's upper jaw. The next day his face became dreadfully inflamed, his nostrils ejected a purulent matter, similar to that discharged by the glandered horse, his body was covered with gangrenous spots, and every other symptom of the glanders appeared, and increased in violence until his death, which rapidly ensued.—*Galignani's Messenger.*

At the Hospital of St. Louis, Paris, M. Emery, one of the physicians, treats most of his cases of psoriasis and lepra with an ointment composed of tar, one part; lard, three parts. This treatment is generally successful, but does not prevent the disease returning.

UNIVERSITY OF PENNSYLVANIA.

MEDICAL DEPARTMENT.

At a Public Commencement, held on Thursday, April 4th, 1844, in the Musical Fund Hall, Locust street, the Degree of Doctor of Medicine was conferred by the Rev. John Ludlow, Provost, upon the following gentlemen; after which an Address was delivered by Dr. Horner, Professor of Anatomy.

New Hampshire.

	Subject of Theses.
Thomas E. Hatch,	Apoplexy.

Vermont.

Charles W. Gleason,	Capillary circulation.

Massachusetts.

William W. Bliss,	Delirium Tremens.
William F. Channing,	Application of Chemistry to Physiology.
Benjamin Heywood,	Spermatorrhea.
Henry Osgood Stone	Polypus of the nose.

Rhode Island.

Edmund V. Hathaway	Scarlatina.

New York.

Wm. C. Benedict	Erysipelas with black tongue.
Joel B. Phinney	Cutaneous diseases.
Leander B. Phinney	Ulcer of the cornea.

New Jersey.

John W. Blackfan	Scarlatina.
Leison E. English	Influenza.
Ephraim Holmes, Jr.	Acute Peritonitis.
Eugene Jobs	Diabetes.
Joseph Parrish	Scrofulous diathesis.
Wm. R. Phillips	Electricity.

Pennsylvania.

Almon Z. Berdin	Intermittent Fever.
Adam S. Bare	Disease of the ovaries.
Samuel R. Bleight	Intermittent Fever.
Martin H. Boye	Structure of the nervous system.
Thomas F. Cullen,	Anchylosis of knee-joint.
William Curran,	Dyspepsia.
John Curwen	Scrofulous Ophthalmia.
Robert Davidson	Acute Dysentery.
Ebenezer V. Dickey	Erysipelas.
Samuel Dilworth, Jr.	Influence of mind upon the body.
George Dock,	The blood as modified by disease.
Abraham H. Fetherman	Pertussis.
Charles S. Gauntt	Mercury and its compounds.
Lewers D. Gray	Purpose and province of Medical science.
Alfred W. Green	Bronchocele.
Theodore B. Hale	Dysentery.
Edward A. Hall	Remittent Fever,
Andrew B. Happer	Influence of Medicine.
Robert P. Harris	Veratria.
Bernard Henry	Aneurism.
William V. Keating	Typhoid Fever.

	Subject of Theses.
William L. Latta	Whooping cough.
Joseph Leidy	Comparative anatomy of the eye.
David B. Marshall	Variola.
Edward R. Mayer	Nitrate of silver.
John H. B. McClellan	Medullary Fungus.
William S. McIlhenny	Dew.
Joseph Priestly	Wounds of Arteries.
Lewis Royer	Delivery of Placenta.
Samuel Sandt	Dyspepsia.
Samuel D. Scott	Physiology of the eye-ball.
Washington Sherman	Feigning of Disease.
Francis Sims	Rheumatism.
John W. Snowden	Diagnostic sign of Uterine Pregnancy.
Moreton Stille	Pathology of cyanosis.
Edward S. Wilcox	Fractures.
Samuel Wilson	Pleuritis.
Wm. Wilson	Use of tartar emetic in obstetrical practice.
Thomas H. Wilson	Dysentery.
Thomas Wood	Inversion of the womb.

Delaware.

John T. M. Cardeza	Hepatic Abscess.
Julian Rogers	Acute Hepatitis.

Maryland.

Wm. Tyler, Jr.	Scarlatina.
Richard K. Osbourn	Medical Treatment of Stuangulated Hernia.
Wm. Gray Palmer	Menstruation.

Virginia.

Junius L. Archer	Puerperal Fever.
Peter Barr	Jaundice.
John T. Basye	Croup.
John Roy Baylor	Intermittent Fever.
James W. Bryant	Scarlatina,
Edwin Gray Buckles	Acute Meningitis.
John M. Burton	Dysentery.
Lewis W. Carter	Diarrhœa.
James L. Clarke	Phenomena of catamenia.
Wm. J. Clark	Regimen for dyspeptics.
Thomas J. Cooke	Atmospheric air.
Octavius A. Crenshaw	Spermatorrhea.
Richard Dillard	Strictures of Urethra.
Wm. T. Eldridge	Fractures.
James T. Foley	Cynanche Trachealis.
John N. Garnett	Chronic Gastritis.
Robert Graves	Fracture of the femur.
John B. Green	Icterus.
Solomon Green	Dyspepsia.
John P. Hale	Diseases of Menstruation.
James W. Hopkins	Cæsarean section.
Etheldred W. Lundy	Cynanche Trachealis.
Randolph F. Mason	Scarlatina.
George W. O. Maupin	Scarlatina.
A. Russell Meem	Calomel, use of, in febrile affections.
George B. Moffett	Importance of the knowledge of physiology and diagnosis in the treatment of disease.
Edgar Moss	Amaurosis.
James A. Reid	Belladonna.
Angus A. Rucker	Iodine.
Granville Smith	Aneurism.
Lewis T. Taliaferro	De febre biliosa remittente.
John B. Taylor	Intestinal Worms.
George F. Terrill	Menispermum Canadense.
John Wickham	Inflammation of the kidneys.
Benjamin Wilson	Bilious Remittent Fever.
Wm. M. Wilson	Scarlatina.
J. Lewis Woodville	Hernia.

North Carolina.

Kemp P. Alston	Laryngitis Membranacea.
Richard P. Ashe	Cataract.
John P. Clingman	Fever.
Peter Custis	Acute Gastritis.
George S. Dejarnatte	Mental influence over the organic functions.
Henry W. Faison	Remittent Fever.

	Subjects of Theses.
Peter S. Foster	Koinomiasmata.
Chauncey W. Graham	Pertussis.
Wm. H. Hughes	Puerperal Peritonitis.
Henry Joiner	Intermittent Fever.
Wm. L. Long	Remedial and poisoning influence of lead.
Murdock M'Leod	Acute Pleuritis.
Rawley A. Scales	Puerperal Fever.
Elias F. Shaw	Intermittent Fever.
Joseph J. Summerell	Influence of opium in autumnal fevers.
Moses B. Taylor	The pulse and its modifications.
Elias A. White	Gastritis.
Henry F. Williams	Menstruation.

South Carolina.

Joseph S. Crane	Inflammation.
Edward F. Gregg	Death.
Benjamin S. Screven	Circulation.
John G. Seabrook	Neuralgia.
Wm. Wylie	Epidemic.

Kentucky.

Addison Dimmitt	Physiology of the circulation.
Wm. H. Mackie	Poisoned Wounds.
Alexander K. Marshall	Superfœtation.
Wm. W. Watson	Tobacco.

Georgia.

James R. M. Reid	Remittent Fever.
John H. Roberts, Jr.	Acute Gastritis.

Mississippi.

Mills T. Anderson	Counter-Irritation.
Felix Gorman	Intermittent Fever.
David D. Irwin	Yellow Fever.
Wm. S. M'Intosh	Chronic Hepatitis.

Tennessee.

Franklin M. Compton	Inflammation.
Robert J. Farquharson	Phenomena and causes of inflammation.
Junius H. Howell	Poisoning by opium.
James E. Knott	Protochloride of mercury.
James H. Sharp	Leucorrhœa.

Ohio.

John A. Pettit	Rubeola Vulgaris.
Clement H. Wesson	Primary Syphilis.

Alabama.

Edward Anderson	Atmospheric air.
James W. Harris	Menorrhagia.
Joseph Hearne	Functions of the brain.
J. Claxton Hughes	Puerperal Fever.
James J. Mundy	Congestive Fever.
John B. Sykes	Heat as a morbific agent.
T. Wilkinson	Moral Medicine.

Louisiana.

Charles A. Hardey	Congestive Fever.
Daniel C. Holliday	The eye a diagnostic sign of disease.
Edward L. Skillman	Variola.

Florida.

Wm. Henry Joyner	Acute Peritonitis.

At the Commencement in July, 1843, the Degree of Doctor of Medicine was conferred upon the following gentlemen:

Virginia.

Anderson Bagley	Fractures of Thigh.
Theordore A. Michie	Acute Rheumatism.

North Carolina.

James H. Boon	Fractures.

Total for Collegiate Year, 153.

W. E. HORNER, M. D.,
Dean of the Medical Faculty.